TAKAHASHI et al. S.N. 09/786.442

examples of clinical diagnosis using FACS, reference can be made to a text book, such as "Furo-Saitometorii-Handobukku (Flow Cytometry Handbook)", Yoshio TENJIN et al. eds. (published in 1984 by SCIENCE FORUM INC., Japan), particularly to Section 4: "Furo-Saitometorii-no Rinsho-igaku-eno Ouvo (Application of Flow Cytometry to Clinical Medicine)" thereof. With respect to the methods for conducting immunoprecipitation and immunoassay, reference can be, respectively, made to pages 421 to 470 and pages 553 to 612 of "Antibodies a laboratory manual" (E. Harlow et al., Cold Spring Harbor Laboratory) .- +.

IN THE CLAIMS:

Amend claim 1 as follows:

(amended) Α purified human seven-pass transmembrane receptor protein having the amino acid sequence of SEQ ID NO:2.--

Tamend claim 2 as follows:

--2. (amended) A purified peptide which fragmentary sequence selected from the group consisting of the 6th to 32nd amino acid residues of SEQ ID NO:2, the 1st to 23rd amino acid residues of SEQ ID NO:2, the 1st to 35th amino acid residues of SEQ ID NO:2, the 96th to 108th amino acid residues of SEQ ID NO:2, the 172nd to 198th amino acid residues of SEO ID NO:2, and the 681st to 726th amino acid residues of SEQ ID NO:2 -

11

Amend claim 5 as follows:

nucleic acid derivative thereof, wherein said isolated DNA is a fragmentary sequence of at least 20 contiguous nucleotides in the nucleotide sequence of SEQ ID NO:3.--

Tamend claim 6 as follows:

--6. (amended) An isolated DNA or a chemically modified nucleic acid derivative thereof, wherein said isolated DNA is a fragmentary sequence of at least 20 contiguous nucleotides in the nucleotide sequence of SEQ ID NO:4.--

Amend claim 7 as follows:

--7. (amended) An isolated RNA or a chemically modified nucleic acid derivative thereof, wherein said isolated RNA is a fragmentary sequence of at least 20 contiguous nucleotides in an RNA which is complementary to the nucleotide sequence of SEQ ID NO:3.--

Amend claim 8 as follows:

 $_{-8}$. (amended) A replicable recombinant DNA, comprising a replicable expression vector and, operably inserted therein, the isolated DNA according to any one of claims 3, 4, 5 or 6. \digamma

Amend claim 10 as follows:

protein prepared by a process which comprises:

(a) ligating, to a replicable expression vector, the

c14

TAKAHASHI et al. S.N. 09/786,442

isolated DNA according to claim 3 or 4, to thereby obtain a replicable recombinant DNA having said replicable expression vector and, operably inserted therein, said DNA;

- (b) transforming cells of a microorganism or cell culture with said replicable recombinant DNA to form transformants;
- (c) selecting said transformants from parent cells of the microorganism or cell culture; and
- (d) culturing said transformants, causing said transformants to express said DNA and produce a protein on the cell surface of said transformants.

Amend claim 24 as follows:

which inhibits a ligand from binding to the seven-pass transmembrane receptor peptide of claim 2, which comprises:

contacting said peptide with a ligand which binds to said peptide and a sample which is suspected to contain a substance which inhibits said ligand from binding to said protein or said peptide;

assessing a change occurring in response to a binding of said ligand to said peptide; and

detecting said substance by using said change as an index. \rightarrow

ال ۱

, IS